

What is claimed is:

1. A method for verifying reticle enhancement technique latent image sensitivity to mask manufacturing errors, said method comprising: revising a polygon based on mask CD distributions to provide a virtual statistical mask; obtaining response function statistical parameters based on the virtual mask image; and comparing the statistical parameters to design rule requirements.
2. A method as recited in claim 1, further comprising forming an simulated image of the virtual mask.
3. A method as recited in claim 2, further comprising calculating response functions based on the aerial and/or latent image simulation.
4. A method as recited in claim 3, further comprising collecting measurements and calculating statistical parameters based on the response functions.
5. A method as recited in claim 4, further comprising comparing the statistical parameters with design rule requirements.

6. A method as recited in claim 1, further comprising obtaining the virtual mask by using mask CD distribution to induce statistical variations to layouts which have passed through an OPC procedure.

7. A method as recited in claim 6, further comprising at least one of moving fragments of a polygon and re-sizing primitives.

8. A method as recited in claim 6, further comprising moving fragments of a polygon based on a randomly generated number from mask CD distribution.

9. A method as recited in claim 6, further comprising re-sizing primitives depending on mask CD distribution.

10. A yield prediction tool for mask quality specifications, said tool comprising means for revising a polygon based on mask CD distributions to provide a virtual mask, means for obtaining statistical parameters based on the virtual mask imaging; and means for comparing the statistical parameters to design rule requirements

11. A tool as recited in claim 10, further comprising means for simulating an aerial and/or latent image of the virtual mask.

12. A tool as recited in claim 11, further comprising means for calculating response functions based on the simulated image.

13. A tool as recited in claim 12, further comprising means for collecting measurements and calculating statistical parameters based on the response functions.

14. A tool as recited in claim 13, further comprising means for comparing the statistical parameters with design rule requirements.

15. A tool as recited in claim 10, further comprising means for obtaining the virtual mask by using mask CD distribution to statistically vary layouts which have passed through an OPC procedure.

16. A tool as recited in claim 15, further comprising means for at least one of moving fragments of a polygon and re-sizing primitives.

17. A tool as recited in claim 15, further comprising means for moving fragments of a polygon based on a randomly generated number from mask CD distribution.

18. A tool as recited in claim 15, further comprising means for re-sizing primitives depending on mask CD distribution.